

W. R. MEADOWS

CSI Code: 03930

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REZI-WELD_{TM} GEL PASTE

Multi-Purpose Construction Epoxy

DESCRIPTION

REZI-WELD GEL PASTE is a high viscosity, rapidsetting, thixotrophic, structural, epoxy-based, chemical anchoring/bonding adhesive and injection resin. REZI-WELD GEL PASTE provides high mechanical properties and bond strength to concrete and various other substrates. REZI-WELD GEL PASTE is a two-component, moisture insensitive construction epoxy, which can be troweled, brushed, injected, or pumped.

REZI-WELD GEL PASTE is an easy-to-mix, easyto-apply paste ideal for filling cracks, anchoring, doweling, making small patches and general repairs in horizontal, vertical and overhead concrete surfaces. It is also suitable for surface sealing, prior to pressure injection. When used as an adhesive, REZI-WELD GEL PASTE fills all voids between the surfaces to be bonded.

FEATURES AND BENEFITS

- Patches and repairs vertical or overhead concrete
- Fills all the gaps between the surfaces to be bonded...unlike liquid epoxy adhesives, which might run out and reduce the bond area
- Easy-to-mix and apply with its trowel-grade consistency
- Offers high-viscosity, high modulus and highstrength characteristics
- · Color-coded, innovative, unitized bulk packaging assures proper mixing of two-components
- Excellent bond strength suitable for cap sealing
- Available in side-by-side and universal cartridges

SPECIFICATIONS

- ASTM C 881, Type I, II, IV & V, Grade 3, Classes B & C
- AASHTO M 235, Type I, II, IV & V, Grade 3, Classes B & C
- Various Departments of Transportation Approvals

PACKAGING

8.3 oz (250ml) Universal Cartridge 1 Quart (.95 Liter) Unit 1 Gallon (3.79 Liter) Unit 2 Gallon (7.58 Liter) Unit

10 Gallon (37.85 Liter) Unit

STORAGE: 40-95°F (4-35°C)

COVERAGE: 1 gal neat yields 231 cubic inches

FOR INDUSTRIAL AND PROFESSIONAL USE ONLY

APPLICATION

Surface Preparation...Mechanically abrade all surfaces to be bonded. All surfaces to be bonded must be free of standing water and completely clean of dirt, rust, curing compounds, grease, oil, paint and unsound materials which would prevent a solid bond. Vacuum or blow dust away with oil-free, compressed air. Smooth surfaces require sanding or other mechanical abrasion. Exposed steel surfaces should be sandblasted and vacuumed clean; if not possible, degrease the surface and use sandpaper or a wire brush to reveal continuous, bright metal.

Mixing (Bulk units)...Condition all components to 60-85°F for 24 hours prior to use. Use the double-boiler method or store material in a warm room, prior to application. Pre-mix each component. Mechanically mix at slow speed (600-900rpm) using a drill and Jiffy® Blade or drum mixer for 3 minutes or until completely mixed while scraping the sides to ensure complete blending of components. The mixed product should be uniform gray in color and not show streaks. Avoid air entrapment. Mix only very small quantities by hand for a minimum of 3 minutes or until sufficiently blended together using the supplied stirring stick. Scrape sides of the container to ensure complete blending of the components. Mix only the amount of epoxy that can be applied within the product's potlife. Potlife will decrease as the ambient temperature and/or mass size increases.

(For cartridge mixing and application instructions, see instruction sheet included inside the cartridge packaging unit).

METAL ANCHORS IN PREFORMED HOLES IN

CONCRETE... Preformed holes should be approx. ¹/₄ (6.35mm) larger in diameter than the anchor bolt diameter. The depth of the hole should be 10-15 times the bolt diameter. Fill the hole from the bottom up, about half way, with mixed epoxy and place the bolt, dowel or rebar. Top off with more epoxy and finish. All anchoring or doweling configurations must be approved or designed by an engineer.

CRACKS IN VERTICAL OR OVERHEAD

STRUCTURES...For non-moving cracks and joints, use a trowel to apply the paste full depth and strike off flush at the surface in a single pass. For structural crack injection repairs, use a dual-component gel pump.

CONTINUED ON REVERSE SIDE...

PATCHES IN CONCRETE

STRUCTURES...GEL PASTE makes a highstrength material for patching, topping, grouting and repairing spalls and other defects in concrete. Average thickness of the patch or topping should be no greater than $\frac{1}{4}$ to $\frac{1}{2}$ (6.35 to 12.7mm) per lift, not to exceed a total depth of 1-1/2".

BONDING FRESH CONCRETE TO HARDENED CONCRETE OR HARDENED CONCRETE TO HARDENED CONCRETE ...

Use a stiff masonry brush to apply a layer of mixed epoxy to concrete surfaces. Application rate should be 85-100 square feet per gallon. Place fresh or hardened concrete to mixed REZI-WELD GEL PASTE prior to epoxy adhesive becoming tack-free. If REZI-WELD GEL PASTE becomes tack free prior to application of fresh or hardened concrete, consult a W. R. MEADOWS representative. NOTE: Cured concrete is defined as concrete that has achieved a minimum 80 percent compressive strength.

OTHER BONDING...To bond metal to concrete, apply a layer of the adhesive at 85-100 square feet per gallon (20 mils) to the prepared surfaces and join immediately. Clamping pressure, beyond what will hold parts in place, is not necessary.

SURFACE SEALING...Apply mixed epoxy over entire length of crack to be pressure injected. Ensure complete coverage of the crack face to avoid leaking. Adjacent concrete surfaces must be mechanically abraded to ensure a proper bond. Allow for suitable cure time prior to injecting.

CLEAN UP...Clean tools and equipment immediately with Toluene or Xylene. Clean equipment away from all ignition sources and avoid breathing vapors or allowing epoxycontaining solvent to contact skin. Should this material come in contact with the skin, wash thoroughly with soap and water, not solvent.

PRECAUTIONS

DO NOT DILUTE. Mix complete units only. Not recommended for use when the concrete temperature has been below 40°F (4°C) for the past 24 hours. Do not use to seal cracks under hydrostatic pressure. Do not warm epoxy over direct heat.

TECHNICAL DATA*

The following physical properties were determined at a 1:1 mix ratio of A:B by volume, cured at 77°F (25°C) & 50% RH.

Test Method	Actual	Required per ASTM C 881-99, TYPE IV
Gel Time Per ASTM C 881-99	45 minutes	Minimum 30 minutes
Viscosity Per ASTM C 881-99 Mixed	1/2" Bead-No Sag	Minimum 1/4" Bead-No Sag
Compressive Strength Per ASTM D 695-96 @ 1 day @ 7 days	9,000 psi (62 MPa) 11,500 psi (79 MPa)	Not Required Minimum 10,000 psi (70 MPa)
Compressive Modulus Per ASTM D 695-96 @ 7 Days	400,000 psi (2758 MPa)	Minimum 200,000 psi (1,400 MPa)
Slant Shear Bond Strength Per ASTM C 882¹, Moist Cured @ 2 days (Old to Old Concrete) @ 14 days (Old to Old Concrete) @ 14 days (New to Old Concrete)	1,500 psi (10 MPa) 2,000 psi (14 MPa) 2,500 psi (17 MPa)	Minimum 1,000 psi (7.0 MPa) Minimum 1,500 psi (10.0 MPa) Minimum 1,500 psi (10.0 MPa)
Tensile Elongation Per ASTM D 638-98 ¹ @ 7 days	1.5%	Minimum 1%
Heat Deflection Temperature Per ASTM D 648-98¹ @ 7 days	125° F (53°C)	Minimum 120° F (50°C)
Linear Coefficient of Shrinkage Per ASTM D 2566¹ @ 7 days	0.003	Maximum 0.005
Water Absorption Per ASTM D 570-98 ¹ @ 7 Days	0.51% w/w	Maximum 1.0% w/w

Color: Part A...White Pot life: 45 minutes at 77°F Part B...Black

Cure time: 7 days at 77°F

Mix ratio: 1:1 by volume **Shelf life:** 1 year in unopened container

SAFETY AND TOXICITY

Unused epoxy will generate excessive heat, especially in large quantities. Unused epoxy should be mixed with dry sand in the container to help lower heat. Refer to Material Safety Data Sheet for complete health and safety information.

TO VERIFY MOST RECENT TECHNICAL DATA SHEET IS BEING USED, VISIT OUR WEBSITE: www.wrmeadows.com.

ADDITIONAL RESTORATION PRODUCTS FROM W. R. MEADOWS CAN ALSO BE FOUND BY VISITING OUR WEBSITE.



LIMITED WARRANTY

"W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order." Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no

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^{*}All technical data is typical information, but may vary due to testing methods, conditions and operators.

¹Independent reports are available upon request.